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INSECTS

INJURIOUS TO THE FARMER & GARDENER.

A SERIES OF ESSAYS, BY WILLIS GAYLORD.

(Continued.)

That delicious fruit, the peach, is subject to the attacks of the curculio, as well as the plum and cherry; but its worst enemy is the borer, or *Agira exitiosa* of Say, which attacks the tree in the same manner as the apple-tree borer does that tree. The male and female are very unlike in appearance. The male is smaller than the female, has four transparent wings, bordered and veined with steel blue; while the wings of the female are, the fore pair blue and opaque, the hind pair transparent, with border and veins like those of the male. The coloring of the bodies too differ essentially, but the wings are sufficiently characteristic to mark the sexes. In its general appearance it has considerable resemblance to the wasp, more than to the ordinary moth. The female lays its eggs on the bark near the ground: the larvæ when hatched penetrate the bark, and devour that and the sap wood. The matter thrown out, and the exuding gum, mark their burrows at once. In the northern States the winged insect appears in July mostly; but some will be found from June to October: hence there will be several broods or sizes of borers in the same tree. The moth will sometimes deposit its eggs high up the trunk on the forks of the branches, but mostly near the root. Dr. Harris states that the following method will effectually protect the neck or most vital part of the tree, and the one most liable to attack. "Remove the earth around the base of the tree, crush and destroy the cocoons and borers that may be found in it, and under the bark cover the wounded parts with the common clay composition, and surround the trunk with a strip of sheathing paper eight or nine inches wide, which should extend two inches below the level of the soil, and be secured with strings of matting above. Fresh mortar should then be placed around the root, so as to confine the paper and prevent access beneath it, and the remaining cavity may be filled with new loam. This operation should be performed in the spring, or in the month of June. In the winter the strings may be removed, and in the following spring the trees should be again examined for any borers that may have escaped search before, and the protecting application should be removed." Lately it has been said that salt placed in a circle some six inches from the tree, will protect it from the borer, and promote the health of the tree. Salt, but not brine, should be used for this purpose. It is probable that heaping leached ashes around the tree during the summer, or washing the trunk with strong lye, as recommended for the apple borer, would operate favorably for the protection of the tree.

We have seen this borer on the cherry tree, and traced a row of perforations from near the soil to a considerable distance up one of the main branches, the exuding gum furnishing a ready means of doing this. The pear-tree insect, *Ageria*, differs from the peach-tree insect, in not being so large, and having the prevailing color of the upper side of the body, a purple black, with a golden yellow under side. This insect has sometimes done much injury to the pear tree, but is seldom in such numbers as to arrest the attention of the farmer, or cause such loss as the beetle before described.

If the farmer, or orchardist, finds upon any of his trees ants in abundance busily engaged in running up and down, or if he observes the shrubbery or grass under them covered with wasps, flies, and other insects fond of sweets,

he may be very certain of finding, either on the under side of the leaves, or the ends of the tender twigs, colonies of the *aphis*, or plant louse, which, sucking the juice from the tree, convert it into the sweet viscid substance, of which these insects are in search. To the curious observer, the manner in which the ant obtains from the *aphis* this fluid, the tubes that furnish it, and the greediness with which they seek it, furnish a most instructive lesson on the instinct of animals; but we can only refer on this subject to the works of professed etomologists. Wilson, Harris, Say and others. The apple, plum, and peach trees, appear to be the favorites of the *aphis*, although there are few trees or shrubs that have not their colonies. A few years since, we had, among other plum trees, a fine tree of the white Magnum-bonum variety, under which passed a row of currant bushes. Happening one day to observe that these bushes were covered with flies, wasps, ants, &c., we looked at the leaves of the tree, and saw instantly from their curled appearance that the tree was attacked by the *aphis*. Choosing a position which brought the tree between us and the sun, the curious spectacle presented itself, of a continued shower of minute drops from the tree, a literal rain of liquid honey: and this, falling on the bushes below, had drawn together the flies and ants that were upon them. The branches of the tree and the leaves were full of ants running about, ready to burst with their luxurious living, but evidently unable to consume the food as fast as it was provided for them. It is evident that a tree must suffer from such a rapid abstraction of the vital fluid, and the result in most cases shows such to have been the case. But though it is thus evident plants and leaves may thus be covered with a substance much like honey, we do not believe that what is termed honey-dew is the production of an *aphis*. We have seen a tract of woodland containing some thousands of acres, in a single summer's night, so covered with this viscid sweet, that every leaf glittered in the sun's rays; and after a careful examination we could not detect a single *aphis*, a few scattered ones on some oak leaves excepted. We know of no remedy for the *aphis*, when it appears in such myriads on the leaves of trees; for, as they are on the lower side, showering the tree will produce little or no effect. When on the extremities of the twigs, as they not unfrequently are on grafted or vigorous shoots, if where they could be reached, we have killed them by dipping the branch in a vessel of some kind containing soap suds. A wetting with whale-oil soap and water, might be as effectual, but we have never used it.

The currant and gooseberry have both borers and caterpillars; the first penetrating some part of the trunk, and the latter feeding upon the leaves. If a currant bush with its foliage suddenly withers and dies during the summer, it is probably caused by a borer, which, penetrating the wood from an egg laid in the bud, forms a burrow in the pith of the stem, and kills the plant. All such injured stems should be cut up and burned at once, as the surest means of freeing ourselves from this pest. The worm sometimes appears in such numbers as speedily to strip the bushes of all their foliage; and as there are two or more crops of these worms in a season, the bushes are not unfrequently killed by the closeness of the defoliation. It is said that dusting the bushes infested by the worms with fine cayenne pepper, when the dew is upon them, will kill or expel the worm; and it is probable a decoction of the same substance showered over the leaves would produce the same result. In the few instances where our bushes have been attacked by this small green worm or caterpillar, showering plentifully with soap suds has saved the bushes and fruit.

Although not coming precisely under the class of trees

this section is devoted, to the locust, which as a widely spread and valuable tree, both for its timber and ornamental purposes, would seem to deserve a mention. In many places the borer has been so destructive, that farmers have given up planting it, few coming to maturity, or a size to be valuable. The beetle that attacks the locust is the Painted Clytus, *Clytus pictus*, and may be found on the tree in the month of September. This is the season of pairing, and the eggs are soon after deposited in clusters of six or eight in the crevices of bark. The eggs are white and easily detected. When hatched, which is in a short time, the young grub burrows at once into the bark, where they remain during the winter in a torpid state. In the spring they bore into the wood inwards and upwards in tortuous burrows, and as the original opening through the bark is soon closed, new ones are soon made by the grub for its castings. These operations cause the wood and bark to become irregular and unsound, and if the grubs are numerous the tree is almost destroyed. The grubs attain their full size between the middle and last of July, are then changed to pupæ, and soon leave the tree as perfect insects. All its transformations are effected within the year, in this respect different from many of the borers that infest trees. The more vigorous the growth of the locust, the less liable it is to receive injury from the borer: indeed there is but little in attempting to grow this tree where the climate and soil are unfavorable. Where the beetle attacks ornamental trees, as it is easily seen, a daily examination of the trunks, and catching or destroying such beetles as show themselves, is perhaps the surest method of destroying them. If trees are much damaged they may be cut down at once, and new and vigorous shoots will soon take their place, which may more easily be kept free than trees already infested. Locust trees frequently receive little benefit from washing with lime, lye, &c., because the application is made at a time when the insect is unassailable, as in the spring or early summer for instance. The proper time for washing trees infested with any borer is while the perfect insect is depositing its eggs, or immediately before or after. If a tree is whitewashed immediately before the egg is deposited on the whitewash, and this not being to the taste of the young grub, it generally perishes. If while the insect is active, many of them will be killed, disturbed and driven off, and the tree saved; or if immediately after the deposition of the egg, the escape of the larvæ is usually prevented, and its death is certain. This shows the necessity of an acquaintance with the habits of injurious insects, if we hope to assail them successfully.

SECTION IV. Insects Injurious to Domestic Animals.

It must be considered a singular circumstance that scarce an animal of any kind can be named which is not made the prey in some form of animals parasitical or otherwise, lower in the scale of being than themselves. Even man himself suffers in this way, and the animals domesticated by him not unfrequently fall victims to some of the various insects that seek their food, and provide for their offspring by preying on the living. The hair, the skin, the flesh, the intestines, all have their injurious insects, and even the vital parts are not always exempt. Lice multiply in the hair and feathers; grubs infest the nostrils, skin and stomach; the Entozoa are found in the flesh of the living and apparently healthy beasts; and one species, the *Filaria*, has in more instances than one taken up its abode in the eye itself; worms of numerous varieties harbor in the intestines, and in many ways cause irritation, disease and death. Where the field is so large, it cannot be expected that every part of it shall have been fully explored; but much useful information has been gleaned, that, if

spread before the farmer, can scarcely fail of being beneficial to him.

The horse is one of the most valuable of our domestic animals, and perhaps the one most liable to danger from the attacks of insects. Many good horses are lost every year from bots, or diseases connected with or produced by them. Some of the best writers on the horse and the insects injurious to the animal, divide the horse-bot into three kinds, all the progeny of a species of *Estrus* or horse fly. The first and the one most common, is the parent of the bot commonly observed in the stomach of the horse. The name of this fly is the *Gasterophilus equi*. This fly deposits its eggs on the legs of the horse, and when the horse bites or licks the spot covered by the nits, the young larvæ adheres to the tongue and are carried into the stomach, where they fasten themselves to its coat, and remain until ready to assume the pupa state, where they cease to adhere to the coat of the stomach, are expelled with the dung, pass into the earth and through the chrysalis state, and finally emerge perfect insects. This bot-fly is too well known to need description. Any person may satisfy himself of the manner in which this worm is produced from the egg, by scraping some fresh deposited ones from the hair, and placing in his closed hand, first moistening it with saliva; or he may place his hand thus moistened on the leg of the animal so as to cover a quantity of the nits, and in either case he will soon find his moistened hand covered with living larvæ.

Another bot fly, the *Gasterophilus hæmorrhoidalis*, deposits its egg on the lip of the horse, whence the larvæ are taken to the stomach. It also, and perhaps more frequently, deposits its eggs, during the evacuation of the dung, and the subsequent protrusion of the intestine. These bots are frequently found within the verge of the anus, whence their name. They are less injurious to the horse than the other kind, but sometimes occasion no little itching or irritation, when an injection of the linseed oil may be used to dislodge them.

A third bot-fly is the *Gasterophilus veterinus*. The horse, while feeding or standing in the harness, will at times be observed to fling up its head suddenly, as if hurt or alarmed; and frequently, if at liberty, will run off to some other place. The trouble is occasioned by this fly, which, poisoning itself under the belly of the animal for a moment, darts between the fore legs and strikes the throat of the horse immediately between and above the upper curve of the jaw, depositing an egg at each blow. This is done by a sharp-pointed ovipositor, and hard swellings are sometimes caused at that point, from the repeated stings inflicted. It is supposed the red bot, found occasionally in the stomach of the horse, proceeds from this fly; but in what manner the larvæ makes its way into the stomach, after the egg is deposited in this way, is not very obvious. We have found bathing the stung part or the swelling, with spirits of turpentine, to act favorably, either by allaying the irritation, or, perhaps from its penetrating qualities, destroying the young larvæ.

In what manner the bot in the stomach of a horse causes its death, does not seem to be well understood; and from the fact that horses in perfect health, when accidentally killed, have had their stomachs found filled with bots, some have denied that they ever do injure the horse or cause death. It is a law of nature, however, that all parasites, whether on plants or animals, do inflict injury and may occasion death; and the bot does not seem to form an exception to this law. And from the facts that they do sometimes fix themselves in the upper part of the windpipe and produce a fatal irritation and cough; that they sometimes collect in such masses in the first intestine as to completely choke it up and fatally obstruct it; and that when death attributed to bots has happened, the stomach immediately on death has been found perforated in a multitude of places, it seems scarcely possible they should not occasion death. The bot may not be guilty of all the mischief charged upon it, but enough will remain to justify us in considering it the most formidable insect enemy of the horse. Little can be said in favor of any of the thousand remedies prescribed for the bot, as skillfully constructed experiments have shown that no agent sufficiently powerful to kill the bot can be brought to act upon them, that would not be equally fatal to the horse. Prevention, in this case, is better than cure. If, while the season of the bot-fly lasts, the legs be wiped down carefully once a day, with a cloth moistened in warm water, or where this is not convenient, if the eggs are scraped from the hair with a sharp knife as often as

they are deposited, there will be little danger of enough getting into the stomach to produce injury.

There are two other kinds of worms that are sometimes injurious to the horse. One of these is the long round worm, *Amelancus teres*, found in the stomach and small intestines. A smart dose of physic will usually expel these; but Youatt recommends, as not interfering with the feeding or work of the horse, emetic tartar with ginger, made into a ball with linseed oil and molasses, and given every morning half an hour before the horse is fed. The other worm is the needle-worm or *Ascaris*—small, and found principally in the rectum or large intestines. They are discovered by the irritation they cause about the anus, and in that case an injection of oil will generally prove an effectual remedy.

The sheep has several insect enemies, that at times cause great losses of this valuable part of the Farmer's domestic stock. Of these, one of the worst is the sheep-bot, *Estrus ovis*. During the summer months, flocks of sheep may be observed in a state of great agitation, their noses close to the ground, stamping violently occasionally, and seeming to listen as if for some enemy. The cause of this disturbance is the presence of the fly of this worm, one of which is sufficient to alarm a whole flock. The fly is smaller than the horse bot-fly—of an ash-grey appearance, owing to white spots on a dark ground, and glistening wings. It makes its attack on the nostril of the sheep, in the mucous covering of which it deposits an egg, the young larva from which crawls up the nostril and makes its way into some of the sinuses of the upper part of the nose. Here it remains till the next year, when it quits its hold, descends to the nostril, and is usually expelled by sneezing. It penetrates the earth in which it passes the pupa state, and emerges a perfect insect in June or July. The irritation the worm occasions as it works its way up the nose, is maddening to the animal: the inflammation caused sometimes extends to the brain, and the animal dies in convulsions. Unless more than one is present, the sheep is in not much danger after the irritation is over; but where a number of them are found, they are very injurious in all their stages. Many remedies have been prescribed for this worm in the head of sheep, but unfortunately, as in the case of the horse-bot, with little success. Injections of soap-suds or of animal oils mixed with water, or of spirits of turpentine reduced with water, have sometimes been successful, when the larva was accessible; as have fumigations of burned leather or horn, causing the animal to sneeze violently. In some extreme cases, or where the animal was of great value, trepanning has been resorted to with success; but unless done skillfully, the remedy would be more fatal than the insect. As preventives, we have found troughs to which the sheep could have access at all times, the bottoms to be smeared with tar over which salt was to be strewn, to be one of the readiest and best; but on no account should an occasional tarring of the nose be omitted during the summer months, on those farms on which the fly is found. Furrows should occasionally be opened in sheep pastures, as instinct teaches the animal, when attacked, to fly to these or some other place where dry earth or dust can be found, as his best security against this enemy.

Another enemy of the sheep, which operates most injuriously to the health of the animal, and on its wool, is the well-known sheep tick, *Hippobosca ovina*. This animal lays only one egg, which is the nymph or pupa; is first white, and then brown, and fastened to the wool of the sheep. The sheep tick is found most commonly on poorly fed sheep in the spring; and all that are not taken off in the wool at shearing, seek refuge on the lambs, and bite and irritate them at pleasure. Our remedy for the tick, has been, at the time of washing, to rub a handful of soap on the animal before putting it in the vat; and as, in the process of washing one or two hundred, the water will become a strong suds, dipping the lambs in it will free the whole flock. In England, a common wash "is a pound of arsenic, boiled with a pound of soft soap and a pound of purified potash, in four gallons of water. When the arsenic is dissolved, the solution is thrown into a dipping tub, and forty gallons of water added, into which the sheep are plunged; care being taken to allow none of the fluid to enter the mouth of the animal." (Farm. Mag. 1828.) A German writer, Bock, advises that sheep infested with ticks be dipped in a decoction of the leaves of the common maple.

Sheep are exposed to the attack of a flesh-fly, *Musca carnaria*, which deposits its young in any offensive mat-

ter collected in the wool on any part of the animal; and these attack the flesh with such voracity, that unless speedy relief is afforded, the poor creature may be said to be literally eaten alive. It is remarkable with what instinctive certainty these flesh-flies will collect around an animal already "struck," all ready to contribute their part to its destruction. Occasionally the effects of this fly are severely felt in this country, but in a slight degree compared with those experienced in Europe. When a sheep is discovered to be infested with maggots, it should at once be removed from the flock, which should be taken from the field to another, as a partial preventive from the fly. The diseased animal should be thoroughly washed in strong soap suds—the wool and all filth carefully removed, to show the extent of the evil; all the insects visible picked out of the lacerated flesh, and the wounded parts completely washed in spirits of turpentine. In the few cases that have occurred in our flocks, this course has proved entirely successful; a single application of the turpentine, if the wounded parts are thoroughly penetrated by it, bringing out the insects that may be concealed from sight. It may here be remarked, that we have found this application of turpentine the best remedy in all cases where sores or wounds in animals have been attacked by flies, and if used previous to the attack, it is one of the most certain preventives.

(To be Concluded.)

From the Plow Boy.

ANALYSIS OF SOILS.

BY CHARLES WHITTLESEY, ESQ.

When we speak to a western agriculturist of the chemical constitution of that soil upon which he expends his labor, and from which he draws as well the luxuries as the sustenance of life, he is apt to feel that we are introducing a subject rather beyond his comprehension, and foreign to his interest. The present force of vegetation, which our valleys and our hills exhibit to the eye, is regarded as an eternal principle, inherent in our lands, to operate without decay until the earth shall be no longer taxed for the support of man. It may be true, that the agricultural interest is well aware that a period is fast approaching when the assistance of art will be indispensable to enable nature to keep pace with her early efforts in the productions of the field; that the intelligent farmer plainly foresees, when the fattest of our soils, ranking as they do above those of any region of the inhabited globe, will, if unaided, show marks of exhaustion; and secretly reflects that the Creator, in bestowing upon the surface of the earth this power of germination and vegetable growth, only intended to present, for the occupation of man, a field wanting in no natural requisite for his early support, but made it equally indispensable that the innate vegetating principle and the mechanical condition of the soil should receive his labor and attention. It was enough that land came into our possession so provided, that, by proper industry, all our rational wants might be supplied therefrom. Indeed, more than this would not have been possible, under the system of vegetable economy which we observe. Although the naked earth gave life and support to plants in its primitive state, and consequently prior to the infusion of decayed vegetable matter through the comminuted portions at the surface, yet modern researches have firmly established proof of the fact, that most of the ability of the soils to sustain organic life, is owing to a constant return of the same matter to the source from whence it came. A newly excavated bank, sends up at first but a few scattering stalks, and these are more often sickly and short-lived. The warmth of the sun, and moisture from the clouds, retained by the earth, and communicated day after day to the seed or root, bring a shoot into existence; but food for the new-born vegetable is wanting, and it pines upon the stem. Such we may suppose to have been the condition of our soil as it emerged from the waters, by which it was surrounded; the first sample of each tree, shrub and flower, being planted by the Almighty on a sterile rock with merely the power of sustenance and reproduction. The effect of the atmosphere and the seasons was to divide the particles more minutely, and thus enable the fibrous root to make its way more readily in search of aliment. The growth of each successive year exceeded that of the preceding in strength and beauty, furnishing for its posterity a better nutriment than it possessed itself, till at length vegetation, in all its forms, reached a state of full perfection. Thus, the fruitfulness

of our grounds may be considered as arising from a tedious and secondary process in operation ever since original verdure appeared upon them. Their richness is not to be deemed a primeval gift, bestowed at the time when the "dry land appeared," but the result of a continued industry in nature, replenishing and over-replenishing the exhaustions of spontaneous production. And we can safely say, that so long as the produce of a soil is RETURNED TO ITSELF, to decay and mingle with the elements, no deterioration or weakness will be observed.

If then it is true, that the goodness of land is to be in a great degree attributed to the supply, destruction, and decay of forests and shrubs, when the husbandman steps in, consumes the forest by fire, and roots out the shrub with his plow, this renovating process is at an end. Every blade of grass or corn exhausts something of the stock of food garnered up in the earth by time; and sooner or later, a point of barrenness will arrive, when it must be suffered to rest. Then the never-idle laws of the natural world combine to restore strength and youth to a weak worn-out portion of her territory.

We would not be understood, as asserting that a plant takes nothing but what has been in vegetation before, as it is every where known, that the real earth's alkalies and oxides, as well as the atmosphere, assists in supplying it with sustenance. And the soils of a particular mineralogical character, are necessary to furnish by a due COMBINATION of minerals, alkalies, and earths, WITH VEGETABLE MOLD, a bed, which shall sustain the highest luxuriance. We merely intend to advance the statement, that without any aid from the botany of organic matter, mineral constituents alone would afford but a sorry vegetation. It must therefore be evident, that man, having taken possession and cut off the natural sources of supply, assumes the charge of renewing, to the extent of his ability, the draft he is making upon the soil. The depth to which earth becomes vegetable loam, under the most favorable circumstances, is but a few inches. All beneath this thin crust is of a geological character, and merely forms the basis of the upper portion. In instances where there is power of vegetation at great depth, it results from alluvions, which have obtained their extra wealth by a robbery from other lands, higher and more exposed to abrasion by rains.

A little calculation will show with what rapidity the exhaustion of land progresses. But before considering this point we will detain the reader to present some facts, developed by the geological survey of Massachusetts, and reported by Professor Hitchcock, in the winter of 1838—9. A substance had been known to exist in soils called "geine," but by the usual method of analysis it was driven off, and consequently went into the item of "loss," in summing up the results. Professor H. describes it thus:—

"When wet, it is a gelatinous mass, which on drying, becomes of a deep brown or almost black color, without taste or smell, and insoluble in water; and, therefore, in this state incapable of being absorbed by the roots of plants. Yet, after the action of alkalies upon it, it assumes the character of an acid, and unites with ammonia, potassa, lime, alumina, etc., and forms a class of bodies called GEATES, most of which are soluble in water, and, therefore, capable of being taken up by plants. And it is in the state of GEATES, that this substance, for the most part, exists in soil."

By a method of investigation practiced and perfected by Dr. Dana, of Lowell, Mass., this ingredient is obtained without loss, and Professor Hitchcock has adopted Dana's rule of analysis in the State of Massachusetts. Dr. Dana's description is also better given in his own words:

"By GEINE," he says, "I mean all the decomposed organic matter of the soil. It results chiefly from vegetable decomposition; animal substances produce a similar compound containing azote."

Geine exists in two states: soluble and insoluble: soluble both in water and in alkali, in alcohol and acids. The immediate result of recent decomposition of vegetable fibre is abundantly soluble in water. It is what is called solution of vegetable extract. Air converts this solution into SOLID GEINE, STILL PARTIALLY SOLUBLE IN WATER, wholly soluble in alkali. Insoluble geine is the result of the decomposition of solid geine; but this insoluble geine, by the long continued action of air and moisture, is again so altered as to become soluble. It is speedily converted by the action of lime into soluble geine. Soluble geine acts neither as acid nor alkali. IT IS CONVERTED INTO A SUBSTANCE HAVING ACID PROPERTIES BY

THE ACTION OF ALKALI, and in this state combines with earths, alkalies, and oxides, forming neutral salts, which may be termed GEATES. These all are more soluble in water than solid geine; especially when they are first formed. Their solubility in cold water is as follows:—beginning with the easiest, magnesia—lime—manganese—peroxide of iron—it does not unite with the peroxide of iron) alumina—baryta. The geates of the alkaline earths are decomposed by carbonated alkali. The geates of alumina and of metallic oxides, are soluble in caustic or carbonated alkali without decomposition. The geates of the alkaline earths, by the action of the carbonic acid of the air, becomes SUPER GEATES, always more soluble than neutral salts. Soluble geine, therefore, includes the watery solution—the solid extract caused by the action of air on the solution, and the combinations of this with alkalies, earths, and oxides. Insoluble geine includes all the other forms of this substance.

Soluble geine is the food of plants. Insoluble geine becomes food by air and moisture. Hence the reason of employing pearl-ash to separate soluble and insoluble geine in analysis.

ROT IN POTATOES.

Mr. Editor—Sir: Being a subscriber to your paper, and noticing you are always ready to answer inquiries on subjects that interest the farmer, I would ask as briefly as possible, for information respecting the rotting of potatoes in the field. Most of the potatoes in this vicinity, with the exception of some very early kinds, are affected with rot. It commences on the outside of the root and extends until the whole becomes soft. They are decaying very rapidly. In some fields where it has not been discovered till within the last five or six days, but few can now be found that are not affected more or less. It is the opinion of some there will not be enough saved for seed. Where they have been dug and put in cellars, after the rot had commenced on some, the whole have entirely spoiled.

We are informed, they are in the same condition in the neighboring towns and the adjoining part of New Hampshire. The weather for about a fortnight previous to the first of September, was very wet, and towards the last of August, the vines rusted suddenly, being dead in three or four days after the rust began; yet they yield tolerably well. Now sir, can you tell us the cause of this decay, in the root? And can they be sorted so effectually as to save those not yet affected? Or must the crop be a total loss?

A SUBSCRIBER.

South Woodstock, Vt., Sept. 9, 1844.

We apprehend there are not many in this country who have much experience on this subject. We hear many complaints this year, from various quarters, of the rotting of potatoes in the field, but as we have never suffered from rot in our own fields, nor seen the disease prevailing in the fields of others we can do no more than theorize on the cause or causes of this attack on the most useful root with which Providence has favored us.

It has in this country been very generally supposed that the potato is not injurious to any soil; that their tendency is to enrich rather than to impoverish the grounds that bear them, though our own individual opinion has long been that potatoes are more exhausting, or at least more injurious to some kinds of soil than Indian corn is. On some of our sandy loams we find we have better harvests of grass and of hay after corn than after potatoes, though both fields were equally manured.

We also find that rotation is more necessary when potatoes are planted than in corn or other crops—that when planted for two or three years in succession, on the same plot, the harvest diminishes and the vines are much more liable to rust. This has been noted in N. Hampshire where very large quantities have been raised for distilling—also in Maine where the soil is well adapted to the potato.

We have seen English accounts of diseases in potatoes and to such extent that whole counties have discontinued all attempts to raise them. Some have recommended procuring seed from a distance, and others a strict rotation of crops which would admit the potato crop but once in a number of years.

We are inclined to think a clayey soil is less injured by them and favors their production more than sandy loams. We have raised large quantities of them on our farm on the banks of the Kennebec, and though the soil

there seems to suit them, they are more liable to rust than in Massachusetts. They are very apt to rust when you plant a field with them for two or three years in succession.

The potato plant was considered poisonous in South America; whence it came, but it has much improved on transplanting. Yet now if you expose a potato for two days to the sun it turns green and is not fit for use. Potatoes are thought to be light food and easy of digestion, and this may be when they are grown on congenial soil and become so ripe as to be mealy. But no cooked food is harder of digestion than an unripe or watery potato—such as most people are obliged to eat if they eat any. You will find that an animal which happens to vomit food two or three hours after eating, will always heave up large bits of potato if it has eaten any. Sometimes the bits of potato only will come, the other food being all digested.

We can suggest no better remedy for the rot in potatoes than planting a field with them once only in a number of years, and then on land not very wet. Wet grounds and wet summers are disagreeable to them. We once supposed the more wet from the clouds the better would be the potato harvest; but it is not so. The present crop in our vicinity will be more than middling, though we have had a dry summer. Change of seed, or tubers, may also have a good effect, but both may not remedy the evil spoken of. We should like to hear facts or opinions from other correspondents on the subject of this complaint.

We should like to know whether potatoes are not more liable to this attack when they are planted with green manure in the hill, than when it is spread over the field and mingled with the soil.—Editor Mass. Ploughman.

CULTIVATION OF GOOSEBERRIES.—There is a general complaint that gooseberries mildew; and this is peculiar to almost every variety. We occasionally hear of a kind that are hardy, and a proof against this malady. Different modes of cultivation have been recommended, such as manuring high or scantily, setting the bushes in the shade or sunshine, in wet cold land, and in a warm dry soil, and various remedies such as salt &c., have been prescribed, but generally in vain; they blight and fail.

When at the farm of Benjamin F. Boyd Esq., in Foxborough, a while since, he showed us his method of raising gooseberries, which requires very little trouble and is attended with excellent success.—For some years he had tried in vain the various modes that had been recommended; then he neglected his bushes and let the grass and weeds grow up among them. Under this treatment they flourish well and produced an abundance of fruit. Every second year, sometimes every year, 7 or 8 shovels full of horse manure are applied to each bush.

The soil is light and warm, and the gooseberry bushes are in the warmest part of the garden, exposed to the sun. For ten years they have done well. This year a row only about 30 feet in length produced five bushels. None were mildewed excepting at one end where the soil was broken around the bushes. The grass is mowed on each side of the bushes, and among them are thick grass and weeds, which one would suppose would prevent a crop, or any berries of any value.

Whether this system will do generally or not we cannot say, it may be worthy of experiment on a small scale. If it be of universal application, we should suppose that some sluggard would have discovered it from his first attempt in cultivating this fruit.—Bos. Cult.

Efficacy of bathing in certain morbid states of the mind.—Judging from the beneficial effects of cold and warm water bathing in case of mental irritation caused by cerebral disease, I should feel disposed to consider that the steady use of these remedial agents would, in incipient derangement of the mind, be accompanied by the happiest results. It is much to be lamented that the practice of the regular systematic bathing is not recommended and adopted in this country. The state of the mind is closely dependent upon the condition of the cutaneous secretion. I would advise those who are subject to mental depression, hypochondriasm, vapors, ennui, or by whatever term it may be designated, to try the effect of bathing. I feel assured that in many cases violent attacks of insanity may be warded off by the use of warm or cold bath. In cerebral irritation, evidently the result of vascular excitement, bathing the head regularly every morning with cold water, or vinegar and water, will be found highly serviceable.—F. Winslow's Health of Body and mind.

THE AMERICAN FARMER.

PUBLISHED BY SAMUEL SANDS.

THE AMERICAN FARMER.

The Proprietor of the "American Farmer" establishment, expecting shortly to be engaged in the publication of a daily journal in the city of Baltimore, to which he desires to devote as much of his time as possible, would dispose of this establishment on liberal terms, if an immediate application be made. The character of the "Farmer" is too well known to require comment—it is the oldest Agricultural journal published in this country, being now in its 26th year. The central situation of Baltimore renders it a peculiarly advantageous location for a publication of the kind, and in the hands of a person who had a taste for agricultural pursuits, and a necessary talent for conducting the business department thereof, it might be made to be extensively useful and profitable.

The services of the gentleman at present and for several years past engaged in the editorial department, could be secured, if agreeable to the parties concerned.

The patrons of the "Farmer" are assured, that in case a disposition is not made of it, no interruption will be made in its regular publication. Address, if by letter, post paid, SAMUEL SANDS, Baltimore, Md.

Our exchanges will oblige us by noticing the above.

POTATOES.—We observe by our exchange papers that the Potato crops in some parts of the Eastern States have been attacked with the rot, the same disease that committed such ravages last year, and we see it noted that the earliest planted potatoes have fared the best.

WORK FOR OCTOBER.

We have the second Fall month upon us, and with it it brings its toils and its pleasures—while its toils consist in preparing the ground, and committing the seed to the earth, those toils are not without their pleasures, for they force the mind upon the anticipation of the profits which are to arise from them, and excite in it those pleasurable emotions which spring from the belief, of after ability to meet engagements and contribute to the wants and comforts of one's family—and such reflections as these to the man of warm and generous sympathies are beyond all price, for they serve to assure him in the hope, that those on whom his every affection rests will be well cared for, and that those with whom he may have pecuniary engagements, will have no cause to complain of confidence reposed. And now let us turn to the work which the season requires should be done, and that quickly,

ON THE FARM.

Wheat.—It is full time that every farmer should have his ground in a state of preparation to receive his seed wheat, and perhaps, it would be better that he had it already in the ground; for we must confess that, notwithstanding early sown wheat is subject to the fall ravages of the Hessian Fly, still, we would rather run the hazard of that enemy, destructive as it is, than that simple time should not be given to the plants to attain a sufficient strength of roots to resist the action of frosts. This is our opinion, and it is for our readers to exercise upon it their own better judgments.

Preparation of Seed Wheat.—To avoid smut it is always safest to subject the seed wheat to a soak previous to sowing. This soak may be either made of the ley of wood ashes—a brine of salt; or stale urine, either to be made strong enough to bear an egg, and after permitting the seed wheat to remain therein for twelve hours, it should be taken out, drained, and have a sufficient quantity of slaked lime mixed with it to cover or whiten each grain of wheat. The wheat should in every instance be sown immediately after being taken out of the soak and powdered with lime, as if it remains long exposed after being thus prepared, it is apt to suffer in its germinating powers. We prefer, except upon a close lay or grass-

sward, to plough the seed in 3 or 4 inches, then to harrow and roll. The rolling brings the earth in immediate contact with the seed, promotes early vegetation, ensures a much better stand of plants, and prevents washing.

The following recipe for a soak for seed wheat, has come very opportunely to hand, and we give it a place here. As the initials will shew, it comes from an individual, who, besides being the great pioneer in Agricultural improvement in this country, has been its constant, untiring and enlightened friend for near a quarter of a century—and who has richly earned the name of Agricultural benefactor.

TO PREVENT SMUT IN WHEAT.

To the Editor of the American Farmer:

I always read with especial interest your own remarks and advice to your patrons as to the "WORK" to be done at particular seasons. In your 4th of August number, to which, (having been for some weeks absent) I have just look'd back, you recommend, as you have well and repeatedly done before, that wheat should be steeped before it is sowed—can there be any doubt that every grain would be the better for it,—steeps well prepared, of good ingredients, serve to kill the eggs of insects, to throw off the unsound grain and as a manure for that which is to be committed to the earth. I lately read of one to prevent smut in wheat, which my informer, Mr. Dechest of Tennessee, said he knew to be infallible after very many experiments.—You may not have published it,—it is this: Dissolve a pound of blue stone in as much water as will cover five bushels of wheat, and let it remain therein about 18 hours before it is sowed, and, as he says (allowing me to use his name) you will never have smut in your wheat.

I. S. S.

Quantity of Seed per Acre.—Less than two bushels per acre should not be sown, as a smaller quantity than that will not sufficiently cover the earth, to exclude those pests of the wheat field, weeds and grass, and very certain are we, that full seeding tends to increase the product.

Finishing the Seeding.—No wheat grower should consider his seeding finished until he shall have run water furrows through and around his field, to carry off the rains of winter and keep the plants dry.

Rye.—If there be any who may not have got in his Rye, there is still time, provided no time is lost, and he plough in his seed some three or four inches, and harrow and roll it well.

Quantity of Seed per Acre.—From 4 to 5 pecks per acre is the right quantity—but as the season is late we should prefer the latter, as it will allow some loss from winter killing.

Fall Ploughing.—All stiff clayey grounds will be the better of fall and winter ploughing, provided that work be done in good weather, when the earth is not wet. To plough clays in that state is always injurious, as they become little better than mortar, and seldom can be got into good condition during a season. But if ploughed when in good condition, in the fall or winter, the best effects are derived from the exposure to the frost.

Hogs for Fattening.—These should be penned early, as they take on fat much faster in moderately warm weather than in cold, and consequently consume less corn. They should be given charcoal, ashes, rotten wood and salt while being fattened; and it is important that regularity should be observed with regard to the times of feeding and watering.

To save corn, cooked pumpkins serve an excellent purpose in the commencement of fattening.

Cattle Stabling and Shedding.—All cattle should have dry quarters during winter, and if you have not stabling or shedding to afford it, let us advise you to put them up, as the saving in feed will more than compensate for the cost in a very few years, besides the satisfaction it will afford you, to know that your stock is secure from the winter's rains, sleet and snows.

Pumpkins.—Gather these before they are injured by the frost, and stow them away in some dry place, taking

care not to pack them but a few rows high, and not to put any unsound ones among those which are sound.

Fences.—Examine all on your place, and repair such as need it.

Orchard.—Gather your fruit by hand as soon as ready. Be careful to do it in dry weather, and put them away carefully. Your trees may be pruned of dead limbs; but the wound must be cut smooth and covered with a mixture of equal parts of fresh cow dung and clay, taking care to cover the application with a thick cloth to keep out rain. The trunks of the trees should be painted with a mixture of soft soap and flour of sulphur, in the proportion of a gallon of soft soap to 1 lb. of sulphur.

Draining.—Your wet ground should be drained during the fall months.

Buckwheat.—This grain should be cut before it is nipped by the frost, as its straw is good feed for your cattle.

Work Cattle of all kinds must receive additional attention during this month and the next, as it should be an object with you to carry them into the winter in good condition.

Potatoes and Turnips.—These roots should be gathered before they are frosted. Let them be taken up in dry weather and securely stowed away when they will not be liable to become frozen.

Beets, Parsnips and Carrots.—See to the digging and putting away of these roots.

Cow Yard.—Before you bring your cattle in for winter let your yard be spread a foot deep with mould and leaves from the woods, and so spread as that the centre will be lower than the sides—all the materials you throw into it, will, by the spring, be converted into first rate manure.

Sheep.—See that these animals have shelter through the winter.

We have thus travelled through the list of such duties as are most urgent of attention on the farm, and shall conclude our monthly task, by wishing you good markets for your present year's crop—good crops and good prices next year, and that health, happiness and prosperity may abound with you and yours.

ON MAKING COMPOST MANURE.

Mr. Breck, the intelligent proprietor of the N. E. Farmer, thus describes the method of making compost manure as pursued by Mr. Murray, the superintendent of J. S. C. Green's estate, at Waltham, Massachusetts:

Of making Compost.—Mr. Murray appears to understand the grand secret of success in agricultural pursuits—which is, economy in saving and composting, and the right application of manures; this should not be a secret to any one, and we know it is not with many of our farmers, yet there are some, who, if we may judge from the manner in which they suffer the materials for making compost to waste on their premises, we are constrained to believe are yet unacquainted with the important secret.

Take the article of urine, for instance, and how much is lost to many individuals for want of care, in saving and applying it, and how immensely great, taking it in the aggregate, for our State alone. Those who are acquainted with the value of cow urine, assert that it is fully equal to the solid excrements, and of this we have no doubt: then if the value of the solid excrements is worth \$6 per year, multiply the number of neat stock in the State by that sum, and some approach may be made to the value of an article, much of which is now lost.

On the farm under notice, the urine from the cattle is all saved and conveyed to a cistern underneath the stable, that holds about nine hogsheds. The floor of the stable is sprinkled with gypsum, every morning after the cattle have been turned out and the stalls cleaned. The solid manure is thrown into the cellar below, which is accessible to the hogs. The manner in which the urine is disposed of is as follows: As often as the cistern is filled, a lot of well pulverized meadow mud, or peat, which had been exposed a year, containing 18 common cart-loads, is made into a broad flat bed, with the sides raised up so as to retain the liquor; into this basin the content of the urine cistern is discharged; as the liquor soaks into the

peat, six bushels of ground plaster is spread over the surface, to fix the ammonia; the whole bed is then thrown into a compact form, four or five feet high; stakes are thrust down into the middle of the bed, that some idea may be formed of the temperature of the heap from time to time, which is examined often, that the mass may not get overheated and burnt, as it may be very much injured or be made nearly worthless; by withdrawing the stake, an experienced person will ascertain very nearly the state of the bed by the heat of the stake: but this is not left to uncertainty; a thermometer if inserted in the hole repeatedly, and when it indicates 90 degrees, the fermentation is deemed sufficient; the heap is then shovelled over, and spread a little, and having remained a week in this state, is ready for application, or to be put under cover for future use. Compost from night soil is made in the same way. We saw a number of beds of peat prepared for the reception of this valuable manure, which is delivered from the night carts, \$3 per load. Mr. Murray is particular not to have the heat in his manure heaps exceed 80 or 90 degrees, and when properly prepared, they will retain a moderate heat of 50 or 60 degrees through the winter.

IMPROVEMENT OF GRASS LANDS.

Mr. Samuel Dudley of Roxbury, is a man of much experience and excellent judgement in agriculture and horticulture. He lately gave us an account of his mode of improving grass lands, which we offer for the consideration of farmers; though it may be nothing new, it is what a skilful cultivator after trying various modes, considers the best.

His clayey lands that are too wet for tillage, he harrows after the crop of grass is off in the summer or the first of the fall, doing the work pretty thoroughly till half the sward is broken. Then he sows grass seed, spreads on manure and harrows well with a bush harrow. When this is done there will be a few sods of grass on the top of the ground, but with most of the earth beaten off; these are removed and then the land is smooth.—He showed us a piece of land thus managed, to which he applied 8 cords of manure to the acre. He had taken from it two large crops of grass for two years and it still looked promising. This improvement is durable. Some years ago he practised on wet lands what some call the *new system*, and he found that *old system* more expensive than his present mode, and less permanent, the land was sometimes thrown by the frost and the grass killed, and if not killed the improvement was not durable.

Mr. Dudley generally improves his grass lands that are dry enough for tillage by ploughing in the fall, cross ploughing in the spring, manuring and mixing the sod thoroughly with the soil, and planting early potatoes. In this way he finds that he makes a more permanent improvement than by inverting the sod and sowing to grass immediately. In this case the advantage of the manure for the potatoes is obtained and yet more grass is procured before the land fails and needs to be renewed, which shows an important advantage over the *old or new system*. We present facts and give names for our authority, and leave farmers to judge for themselves.

It has become rather late now for sowing grass seed, though we stated a few weeks ago, that a Mr. Aaron Cass, of West Roxbury, succeeded well in sowing grass seed the first of October, by harrowing it in about two inches deep, but it is much better to sow earlier. Land may be prepared now and the seed sowed just before snow, or too late in the fall for it to vegetate, or it may be sowed in March on the snow or ground, and a tolerable good crop obtained the first year. Late in the fall, too late for it to vegetate, or March, are the most favorable seasons for sowing clover.—*Boston Cult.*

FRENCH FARMING.

Of the effects of soaking seeds in Chemical solutions before Sown.

The Society of Encouragement of Paris, has awarded a gold medal and the sum of 3000 francs to Monsieur Hauterine, of the Department of "Haut Rhen" for his chemical solution for soaking seeds, after a report made in the year 1843, to said society, by the commission appointed for that purpose, composed of four chemists and four agriculturists, who, after testing Mons. Hauterine's process, for three consecutive years, came to the conclusion that it was of the greatest importance to agriculturists in general.

The soil on which the experiments were made was pos-

sessed of no peculiar property, except it had not been manured for several years. The vigor of the plants, according to the report made to the society by the commission, can only be ascribed to the seed having been, before sown, subjected to certain chemical solutions. For example, seeds of wheat steeped in the solution and sown on the 5th of June, had by the 10th of July, tillered into nine, ten and eleven stems, of nearly equal vigor; while seeds of the same unprepared, and sown at the same time, and on the same soil had not tillered more than two or three stems.

The advantages to be derived by M. Hauterine's process are numerous. The wheat will yield more than double when the seed is soaked in the solution—it will hasten the harvest at least ten or fifteen days sooner. No injury can be apprehended to the seed from insects or field mice, for it has been ascertained that even birds will not touch it, after being sown: flies or rust will not in the least harm the plants when growing. Mr. Hauterine's process or solution, is equally beneficial for all kinds of seeds—such as barley, oats, rye, clover, &c., only the soaking in the solution takes more or less time for each kind of seed.

[Translated from the "Annales d'Agriculture."]

We publish the above with but very little expectation that it will prove, as some of our city farmers would call it, "an important discovery for farmers."

We are not very positive on this subject, not having made trials of every substance in nature in order to determine whether manure enough may be forced into seeds to save the trouble of spreading any over the field. We have steeped seeds, and we have sometimes suffered by it. Corn steeped in saltpetre will sometimes vegetate remarkably well and look more green and rank than other corn not steeped. But we think more has been lost than gained by steeping or soaking field seeds.

Wheat must be washed and cleansed to avoid smut. We know this is useful and necessary—but steeping to impregnate the seed so much as to give a harvest without other appliances is a different thing. There can be no harm however in encouraging our young and ingenious farmers to try experiments on a small scale, bearing in mind that an ounce of experience is better, in all fields, than a pound of theory.

French chemists are very ingenious, but mere chemists know but little of farming; they may give us a useful hint, but we must be cautious in adopting their schemes, however plausible, and positive the doctrine.—*Editor Mass. Ploughman.*

From the Plow Boy.

STRAWBERRIES.

MR. EDITOR:

Dear Sir—The enquiry, Why can I not succeed in raising strawberries? is daily made by those who are desirous of cultivating that delicious fruit. A lady said to me a few days since, that she had tried these last ten years, to grow the strawberry. She remarked that her plants blossomed very full every spring, and promised a fine crop, but they always disappointed her. She was solicitous to know the cause of failure.

As there are hundreds who wish some information on this subject, permit me, dear sir, through your valuable paper, to state the result of my experience in the cultivation of strawberries.

I am confident that the information I am about to communicate on this subject, will, if carried into practice, insure every effort successful.

In the first place the right kind of plants must be had to work with, otherwise every effort will prove unavailing.

The plants must be young, of but one season's growth: for example, they should be plants that have grown this season from the parent plants since the fruiting season. They should be taken from productive plants, those which have and still produce first rate fruit, otherwise they are not worth transplanting, and never can be rendered productive.

Care must be taken to obtain both male and female plants in the proportion of ten female, to one male; these should be transported into beds 4 feet wide, two rows in a bed, and say 1 foot apart in the row.

They should be put upon poor ground, otherwise the plants will grow so luxuriantly that they will produce but little fruit. Many have failed in their attempts even

when they have had the right kind of plants, by putting them upon ground too highly manured. July and August are the two best months in the year for transplanting strawberries; for two reasons at least:—the first is, at this time there is no liability of mistaking old plants for young; and the second is, they will make a good growth the same season, and consequently be able to stand the severity of the winter, and moreover, will produce quite a crop the next year.

As to the varieties most desirable to be cultivated, I would recommend the Pine Apple which is large, productive, and good flavor, rather too soft for marketing. The Hudson, well known in the Western States. The Keene Seedling, which is a splendid article, but with me is rather unproductive, and the Hovey's Seedling, which is very large, of a deep rich color, fine flavor, very productive, and meat solid, consequently well adapted for marketing, and is in all respects by far the most splendid, superb variety of strawberry in my knowledge. Every gentleman who wishes to cultivate strawberries, either for family use or for the market, should by all means cultivate the Hovey's Seedling.

The ladies could cultivate them to advantage on their flower plots, they would make very fine borders, for their foliage, is neat and remains green most of the year; their blossoms are pretty, and their fruit is truly sublime.

Having communicated all the information necessary for the successful cultivation of this valuable fruit, for the convenience of those who may wish to test the principles above stated, I would just add, the plants of the varieties above described, can be had of Mr. HUXLEY, Seedsman and Florist, next to the Dennison House, on Fifth Street, Cincinnati. Also, at the Botanic Garden on Walnut Hills, near the Post Office, and we presume from the gardens of the cultivators in the vicinity of Cincinnati.

Very Respectfully, Yours,

JOSEPH BROWN.

Walnut Hills, July, 1844.

FINE FRUIT.

Mr. C. W. Hartwell, of the New England Nursery, Westboro' has left at our office some fine specimens of apples. One kind has no name, though worthy of a good one. It is about the size of the Baldwin, rather long, and of a cylinder form, broad deep cavity at the stem, and at the eye the cavity is tolerably deep and very broad, even at the bottom. Nearly all over light red, mixed with white. The tree is very hardy and vigorous and grows large; one covers an arena of 50 or 60 feet in diameter. It bears well every year, and the fruit is usually very fair. In quality this fruit is equal to any that we have tasted; it is very juicy, lively, and remarkably tender, and so mild that when well ripened it is difficult to distinguish whether it is a sweet or a mild sour. This fruit in mildness and tenderness resembles Jewett's Fine Red, and is a good kind to precede it, as it is in use from the first of September into October, which is about the same time of the Porter. Those who like fruit that is mild and tender and has but little pulp, will prefer this fruit to the Porter, as a dessert apple. It originated in this State. Mr. H. has the trees now in bud.

Orange Pippin.—This fruit is from the northwestern part of New York. It is but little known in this section. The tree is as vigorous and hardy as the Baldwin. A great bearer, and bears constantly. It bears young. Trees 10 years from the bud, and 6 from transplanting, have borne 3 1-2 barrels each in a year.—The fruit is beautiful and splendid. Of a very large size. Form nearly round, large deep cavity at the stem, broad cavity at the eye. The color orange, with a red blush next the sun, numerous brown dots over the whole surface. This is a pleasant apple, but has too much acidity to be universally admired as a table fruit; though we cannot judge well from the specimen, as it has been three weeks. They begin to ripen about the first of September, and continue in succession. Mr. H. has trees for sale, large enough for setting as standards.

It has justly been observed that the Porter apple is hard to beat. All things considered there is probably none superior, for it is excellent for cooking and for the table. Merely for eating, we think the first above described and Jewett's Fine Red, superior to the Porter, as they are more mild and tender, the pulp and juice, in which latter they abound, forming a rich and delicious syrup, on chewing the fruit. Among apples, they are what the Seckel and Belle Lucrative are, among pears.—*Bos. Cult.*

BEES AND THE BEE-MOTH.

Last season we advised our readers to watch their bees in July and August to prevent the entrance of the bee-moth, the most destructive enemy that the bees contend with. During these months the moths hover about the hives and deposit their eggs as near to the entrance as they dare. When the bees are sluggish the moth actually enters the hives and places her eggs where they hatch, and the young worm soon begins to make its web and covers itself in an envelope which the bees never seem to attack. Indeed we have never seen them attack a full grown worm, or attempt to drive it from the hive, though you will often see these worms, on canting up a hive, crawling on the platform under the comb, while the bees pay no attention to them.

The moths, or millers, are brownish, and a half inch long and more, and when their wings are extended they measure more than an inch from tip to tip. They are not seen in the day time, but at night, after the bees have become quiet, they hover around and many of them succeed in making an entrance.

The worms grow to the length of a full inch and are said to come to their growth in three weeks. If you cant up a hive you may sometimes see a large one closely enveloped in his cocoon and fixed snugly at the corner of the hive on the platform. But they are generally found in the upper part of the hive where they are supposed to live on the wax.

When a few have made an entrance they increase fast, for although they all become moths before laying their eggs they are not obliged to quit the hive to effect a transformation, as worms in trees are obliged to do, and in a year or two you will find that they have got exclusive possession of the upper comb in the hive.

Various schemes have been proposed to exclude the moth. Some bee keepers have placed wires before the door of the hive at night and removed them each morning. Others have made covered ways three or four inches long, that the bees might enter and crawl to the comb, having the advantage of moths in the article of legs. But no certain plan has yet come to our knowledge to wholly exclude the moth. Molasses, honey and water, sugar and water, have been proposed to drown the moth after tempting her into the liquid. One objection to these is that bees also will be caught in the same trap.

Last season we were informed that whey was an excellent article to attract and hold the moth, and that bees were indifferent to this liquid. We recommend a trial of whey but have not learned whether it has proved more useful than other liquids. We still think the plan worth a trial.

Last spring we advised our readers to set their hives under trees where they would be shaded for a few hours in the heat of the day, but not to put them into bee houses where the moth would be almost as sure of a shelter from storms as the bees themselves. We have noticed that hives in bee houses have more moths about them than hives that stand out, where the rains descend and the winds come to beat on the outside and drive away poachers, while the awful occupants are secure within.

It is believed that bees will now flourish as well as ever if we can succeed in destroying the moths. Attention is needed at this season of the year to destroy them. Will not bee keepers take the hint, having learned their habits, and see which method will prove effectual? When we are satisfied that worms are numerous within the hive, it is advisable to take up what honey there may be by the first of September or sooner, smoking the bees in the usual mode.

Those who prefer to make use of bee houses to shelter their hives, should take care to whitewash the inside in order to destroy all insects that are disposed to harbor in such places. If great attention is paid it may be that white washing the inside of the house often, while the moths are about, will be a good mode of destroying them.—*Mass. Ploughman.*

Wheat in England.—By our last accounts from England the crop of wheat was large as usual and of a superior quality. The weather had been favorable for harvesting, but only a small part of the crop had been secured. There was more old wheat on hand at the same time last season, and the price had declined considerably within a few weeks, and sales were very dull even at the low prices, which were on an average 51s. per quarter.—*Boston Call.*

SAND AS AN IMPROVER OF SOIL.

Sand, as every body knows, is an aggregation of loose, small grains. Generally it is believed that the grains consist merely of quartz or silica, but by closer examination it is found that many grains of felspar, mica, iron ore, silicates of potash, soda and lime, oxide of iron, &c. are amongst the main mass. If, therefore, sand is brought on fields, we must not believe that it merely improves them mechanically; on the contrary, we may assume that it furnishes them with sources of vegetable nutriment. Because, although the mineral substances of which it is composed are not soluble in water, still they are decomposed by the humic acid, and gradually changed into food of plants. For marshy, or very humic soils, even the quartz is a manure, as it supplies them with silica, in which they are mostly deficient.

As the value of sand, as a manuring substance, consists in the quantity of those of its mineral components parts which are fit for becoming the food of plants, obviously that is to be chosen which is richest in lime, soda, potash, and magnesia silicates: this, however, can be only ascertained by chemical analysis. Sand, moreover, used as manure, ought to be very fine, as it will then present to the humic and carbonic acids, which have to decompose its silicates, a greater scope for contact; a clayey soil, nevertheless, which has to be loosened and improved by sand, requires one of course grains. Although sand, generally speaking, is only used for the improvement of clayey or very humic soils, it may be also useful for chalky soils, as these are always deficient in that quantity of silica which is required by the grain-bearing plants.

On stiff clayey soils, which require an improved texture, a sand is to be used which contains many grains of lime, as those will loosen the soil even better than grains of quartz. On the sea-coast that sort of sand, therefore, which is thrown out by the waves, is used with much success for the improving of clayey fields, as it always contains fragments of shells, rich in carbonate of lime. It is generally first used as litter, and then carried (mixed with excrements) to the clayey fields, which, if the process is often repeated, will not only be improved physically, but also become very fertile.

The coarse sand may be spread over a clayey field to the thickness of half an inch, and in this case it will not only be trodden in by the cattle, but will work downward into the crevices which are to be found in a dried up clayey soil—an operation which will be also assisted by the rain-water. The first subsequent plowing is done very shallow, and the first crop should be oats. After the lapse of a few years or when the field is used as a pasture, sand is again spread to the above thickness, which, in fact is repeated until the clayey soil is changed into a loamy one. The same process is resorted to if sand is used for the improvement of moors, peaty and marshy soils, but here the thickness of the sand may be 1 to 1 1/2 inch. It will improve the moor, and bring the organic matters to speedier decomposition.

On fields rich in humus, where rye is grown, sand a quarter of an inch thick, may also be strewed to great advantage in winter, on the frozen soil; it will also tend to prevent the freezing of the crops during spring. As before stated, the sand may be used in the stable as litter, before applying it.

When sand is used in large quantities, its effects are lasting, unless on marshy soil it sinks so deep as to be beyond the reach of the roots; in this case it will even act no longer physically; so that the spreading of it must be repeated. Clayey and chalky soils, on the other hand, will be constantly improved by large quantities of sand, as the water cannot then carry off any of it.—*Prof. Sprangel.*

PROFITABLE SHEEP.—The following remarks on the produce of a flock of merino sheep, are taken from the Cortland County paper. There are but few men that have done as much to improve sheep, and especially the merino, as Col. H. S. RANDALL, of Cortland, N. Y., and GEO. FLOWERS, of Albion, Ill. We ask the attention of those who have any doubt of the profitability of sheep raising, and of the productiveness of the merino, either in wool or by increase, to the following:

“Henry S. Randall, Esq. of Cortland, has a flock including lambs, of 60 full blooded merino sheep. Their fleeces this season averaged a trifle over 5 lbs. of thoroughly washed clean wool, entirely destitute of any gum excepting the dark crust on the extremities of a few of them,

and this wool sold readily to Dickson & Hibbard of that place for 48 cents per lb. cash. There were no wethers in the flock, and there were but two bucks to swell the average.

A smaller and exceedingly choice lot of yearlings and two year old ewes fleeces that averaged the extraordinary amount of 5 lbs. 10 oz. to the fleece. A two year old buck (from which more than half a pound had been taken in samples) sheared 9 lbs. 12 oz. We understand these sheep have been selected by Mr. Randall with much care from the best flocks of this State and New England, and are not probably now surpassed or hardly equalled by any flock in the United States. Their winter keep (a question of some interest in connection with such an enormous product of wool) we learn on enquiry to have been as follows:—60 sheep fed hay morning and night—at noon daily received 3 bushels of oats and barley until Christmas, after which they received 4 bundles of oats. They received no hay at noon throughout the winter. The grain was cut greenish and was considerably shrunken. This, with a comfortable shed and plenty of pure water, constituted their entire keep. Mr. Randall reared 102 per cent. of lambs.”

[We wish more of our farmers possessed such sheep. We should be glad to receive samples of the above wool. Also specimens from Major Reynolds and others who have flocks of valuable sheep. Small specimens, I presume, could be put in a newspaper and if directed to “Plow Boy, Cincinnati, O.” would reach us.—[Ed. Plow Boy.]

SAVING BEANS.—Every Yankee loves beans, and almost every Yankee raises a few, but it is not every Yankee, however “cute” he may be in other matters, who knows how to save or cure them as they should be. In this climate the trouble is too frequently this—some of the pods which have put out later than the rest, as they form in succession, get nipped by the frost and become spoilt. These being mixed in with the good or ripened beans, are apt to injure them by becoming mouldy. Another trouble in curing arises from not drying them sufficiently. A farmer pulls his beans for fear they will be nipped by the frost. He spreads them upon the ground to dry. A shower comes up: he has many other things to attend to, and forgets or neglects the beans; they get wet—the greenest ones rot—others mould, and black spots appear on most of them, and they are unfit for market. We have had them get ruined in this way often enough to learn better than so to manage them.

We have found that, to be a real successful beanologist, you must first get an early and profitable variety, and as soon as the pods begin to turn yellowish and the beans are full—no matter if they are dry and hard—pull them. Throw them in small heaps for a day or two, and then make a rude scaffold or “saddle,” with stakes and poles, and put them upon it to dry. Or you can make a sort of a stack, or stook, as some call it, as follows: drive a stake or two firmly in the ground; place some brush around the bottom to keep the leaves from the ground; wind the bean-stalks around the stalk, the roots to the stake, building up around it, to the top, and then binding the top layers with a band of straw or common string. Some put a cap of straw on the top, to keep the rain off somewhat. This is not absolutely necessary. The leaves should be placed loosely around the stake. In this way, they will dry and ripen, and come out bright; and good, bright, white beans will always sell for a good price.—*Maine Farm.*

COAL-TAR AS A PAINT.—I think it will be well to call the attention of farmers to the use of coal-tar as a paint. The tar produced in coal gas-works is used extensively in England for painting fences, outbuildings, &c., and is being introduced in this country also. It never alters by exposure to the weather, and one or two good coats will last many years. It is the cheapest and the best black paint that can be used. Our buildings are painted with it, all our apparatus also; and even the wrought-iron pipe we place in the ground, is coated with it. I think if its advantages were fully known, it would be generally used throughout the United States. The government soaked the bricks used in building the fort at Throg’s Neck in this tar, which renders them impervious to water; and posts painted with it are protected from rot when put in the ground, as effectually as if they had been charred.

Manhattan Gas-Works.

CHARLES ROOME.
Am. Ag.

CARROTS FOR HORSES.—We were lately told by the proprietor of one of the most extensive livery stables in this city, that he has had an experience of several years in feeding the common Yellow Carrots to his horses and that he considers them the most valuable article for winter feed that he has ever used.—He considers a peck of Carrots and a peck of Oats worth more for a horse than half a bushel of Oats alone; and for horses that are not constantly employed, the Carrots alone are far preferable to Oats. He would purchase Carrots for his horses, in preference to Oats, even if they cost the same by the bushel; the price of Carrots, however, is generally about half that of Oats. His horses eat the carrots with a far better relish than oats,—so much so, that if a peck of each are poured into the manger, they will eat all the Carrots before they taste the Oats. When fed constantly on Carrots, a horse will drink scarcely a pail full of water in a week. The culture of Carrots is recommended to our farmers, as worthy of their attention.—*Farmer's Gaz.*

GUANO—Farmers, Now's your time.

The subscriber has received 80 sacks of GUANO, which he will sell at \$3½ a hundred if immediately applied for.

D. B. DICKINSON,
Corner of Bond and Lombard sts. or,
LEWIS GROSS, Jr.
No. 85 Smith's wharf.

July 24

TURNIP SEED, &c.

Just received from our Seed Gardens 1000 pounds red top and white flat TURNIP SEED, raised from picked roots, of the finest shape and quality, and the same that has given such general satisfaction the last 20 years.

500 lbs RUTA BAGA SEED, raised as above

800 " do do do imported last Spring the best varieties of English and French Turnips

Price of Domestic Seed \$1 per pound

do Imported do 75cts. do

Also—CABBAGE SEEDS of finest imported; Early Sorts, Flat Dutch, Drum Head and Sugar Loaf Savoy CABBAGE, German Sprouts, yellow and other Radish Seed for late sowing, Half Long, Long Green and Cluster Cucumber Seed, Endive, Lettuce, &c. &c. *Robt. Sinclair Jr. & Co. 62 Light st.*

WHEAT FANS, PLOUGHS, &c.

The undersigned would inform the AGRICULTURAL COMMUNITY, that he has on hand and for sale, various kinds of Farming Implements—among which is his very superior Wheat Fan which, last fall, received the first certificate of excellence awarded by the Balt. Co. Agricultural Society. Also the inimitable Prouty S. S. or Boston Centre-draught, and the far-famed Wiley's Patent or New York Ploughs, right and left hand. The many advantages possessed by these ploughs, are invaluable to the agriculturist, and should be tried by be properly appreciated. Castings for the above always on hand, which being of Northern manufacture, are the most durable extant. *A. G. MOTT, jr 3 4t corner Ensor and Forest sts. Old Town, Balt.*

THRASHING MACHINES & HORSE POWERS.

Two of COPE'S Endless chain Horse Powers and Thrashing machines, all complete, which will be sold low if application be made immediately to *JAMES HUEY & CO. No. 7 Bowly's wharf. Baltimore.*

HUSSEY'S REAPING MACHINES.

HEMP CUTTERS.

CORN & COB CRUSHERS,

CORN SHELLING and HUSKING MACHINES, &c.

Made to order and kept for sale by the subscriber,

Ap. 17.

OBED HUSSEY.

GUANO.

A fresh supply of Guano, just received and for sale by the bag containing from 150 to 220 lbs.

SAMUEL SANDS,
at the office of the American Farmer.

GROUND PLASTER.

The subscriber is now engaged in the grinding of Plaster of Paris, for agricultural purposes, and would respectfully inform Farmers and dealers that he is prepared to furnish it of the best quality at the lowest market price, deliverable in any part of the city, or on board Vessels free of expense, application to be made at the Union Plaster Mill, near the Glass House, or at the office No. 6 Bowly's Wharf, corner Wood street. *P. S. CHAPPELL, or, WM. L. HOPKINS, Agent.*

Jan. 3.

Pulverization.



Decomposition.

A. G. MOTT,

Corner Ensor and Forest streets, Baltimore, sole agent for the sale of "THE BOSTON CENTRE DRAUGHT PLOUGH," Prouty and Mearns' self sharpening patent, with new patent gearing.

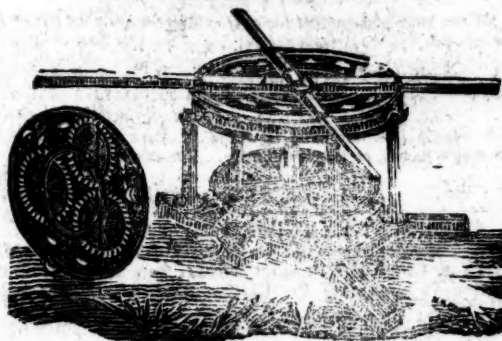
By this admirable arrangement, the labors of man and team are lessened one-half, while the power and steadiness of draught obtained are so great that any depth of furrow is broken up, pulverized, and carried completely over, with perfect ease and facility, and the precision of the spade.

Prices from 7.50 to 13 dollars, with extra point and share. No extra charge for the new gearing. Castings always on hand.

"Spade labor, the perfection of good husbandry."

ap 17

tf



MARTINEAU'S IRON HORSE-POWER IMPROVED

Made less liable to get out of order, and cheap to repair, and at less cost than any other machine.

The above cut represents this horse-power, for which the subscriber is proprietor of the patent-right for Maryland, Delaware and the Eastern Shore of Virginia; and he would most respectfully urge upon those wishing to obtain a horse power, to examine this before purchasing elsewhere; for beauty, compactness and durability it has never been surpassed.

Thrashing Machines, Wheat Fans, Cultivators, Harrows and the common hand Corn Sheller constantly on hand, and for sale at the lowest prices.

Agricultural implements of any peculiar model made to order as the shorest notice.

Castings for all kinds of ploughs, constantly on hand by the pound or ton. A liberal discount will be made to country merchants who purchase to sell again.

Mr. Hussey manufactures his reaping machines at this establishment. *R. B. CHENOWETH, corner of Front & Ploughman sts. near Baltimore st. Bridge, or No 20 Pratt street. Baltimore, mar 31, 1841*

BALTIMORE CO. AGRICULTURAL SOCIETY.

At the annual meeting of the Society held at Govanstown, on the 20th day of October, 1843, the following resolution was adopted:

"Resolved, That such counties of Maryland as may form societies auxiliary to this, shall on the payment of fifty dollars to the Treasurer of this society, be admitted on equal terms as regards competition for premiums, in the opinion of the Executive Committee, such an arrangement shall appear to be expedient."

The Executive Committee at a meeting held in Baltimore, Dec. 23d, 1843, having fully concurred in the above resolution, do cordially invite the farmers of the counties of the state to form auxiliary societies, and become competitors for premiums offered by this society. *JOHN H. B. FULTON, Rec. Sec.*

FOR SALE, THAT VALUABLE FARM & MILLS,

Known as the Mansion Farm or Owings' Lower Mills, situate 11½ miles from the city, on the Reisterstown turnpike, upon which it binds for half a mile, having the Westminster branch of the Susquehanna rail road within 200 yards of the dwelling. This Farm contains about 416 acres, 80 acres of which are in wood, the greater portion of the residue in a high state of cultivation, having had near 10,000 bushels lime put on it the last few years—the growing crop of wheat, rye, oats, &c. &c. looking remarkably well, the meadow comprising about 100 acres is prime land, which has recently been reset.

The improvements consist of a large and well built brick Mansion House, 60 ft. front by 40 ft. deep, exclusive of the back and side additions. A substantial large brick Barn, having stalled stabling underneath for 25 head of cattle, wagon and carriage houses, dairies, smokehouse, blacksmith's shop, corn houses, &c. &c.

A good brick GIST MILL, with a comfortable stone Dwelling for the miller; the mill is in good order, and can grind 40 bbls. of flour per day, which quantity could be increased with a trifling expense.

An excellent SAW MILL has recently been double geared and capable of cutting 2000 feet per day; these mills have a good run of country custom, with an abundance of water at all seasons of the year, the fall of water being about 30 feet. Additional works might be erected at other sites on the premises.

This farm could conveniently be divided, having on the upper portion of it, in addition to the above improvements, a frame dwelling and log cottage, with a good barn and stabling. The whole property is in superior order and repair. The proprietor residing out of the state, is disposed to sell it for less than its value, on accommodating terms. Any person desirous of viewing the premises can do so by applying to the manager on the premises. For terms of sale and further particulars apply to

je 26

REYNOLDS & SMITH,
No. 40 N. Howard st.

AYRSHIRE BULLS.

Several young Bulls for sale, of this valuable dairy stock; they are from stock selected with great care in Scotland, for a gentleman of this vicinity. One of the bulls is one year old—his appearance is impaired by an injury received in his hip from another bull but not of a nature to prevent his being fit for service. Price \$50, deliverable in this city. One other Bull, 4 months old, another 1 month old, dams very superior milkers: the dam of the younger gives when fresh between 7 and 8 gallons a day.

Likewise a 15-16 Durham bull calf, 4 months old, sired by the celebrated bull "Washington Irving," a fine, handsome calf. Either of the calves can be had for \$50. Call on S. Sands, at this office.

see.

je 12

BALTIMORE MARKET, Sept. 24.

Beef, Balt. mess, 8½a	Butter, Glades, No. 1, 13a
Do. do. No. 1, 6½a7	Do. do. 2, 7a11
Do. prime, 5a	Do. do. 3, 5a7
Pork, mess, 10	Do. Western 2, 6a
Do. No. 1, 9½a9½	Do. do. 3, 5a6
Do. prime, 8	Lard, Balt. kegs, 1, 6½a7
Do. cargo, a	Do. do. 2, none
Bacon, hams, Ba. lb 6½a7	Do. Western, 1, a6½
Do. middlings, " 5a5½	Do. do. 2, 5a5½
Do. shoulders, " 4a4½	Do. do. bls 1, 6a6½
Do. asst'd, West. 4½	Cheese, casks, 6
Do. hams, 5a7	Do. boxes, 5a8
Do. middlings, a5	Do. extra, 12a15
Do. shoulders, 3½a4	

COTTON—

Virginia, 9a10	Tennessee, lb. 11a12
Upland, 9	Alabama, 10a12
Louisiana, 11½	Florida, 10a12
North Carolina, 10a11	Mississippi

LUMBER—

Georgia Flooring 12a15	Joists & Sc'ling, W.P. 7a10
S. Carolina do 10a12	Joists & Sc'ling, Y.P. 7a10
White Pine, pann' 12a27	Shingles, W.P. 2a9
Common, -20a22	Shingles, ced'r, 3.00a9.00
Select Cullings, 14a16	Laths, sawed, 1.25a 1.75
Common do 8a10	Laths, split, 50a 1.00

MOLASSES—

Havana, 1st qu. gl 30a31	New Orleans 31a
Porto Rico, 29½a30	Guadaloupe & Mart 26a28
English Island, 29a	Sugar House, 28a36

OAPS—

Baltimore white, 12a14	North'n, br'n & yel. 3½a4½
brown & yell'w 4½a5½	

TOBACCO—

Common 2 a 3½	Yellow, 8 a10
Brown and red, 4 a 5	Fine yellow, 12a14
Ground leaf, 6 a 7	Virginia, 4 a 9
Fine red 6½a 8	Rappahannock, 3 a
wrappery, suitable for segars, 8a13	Kentucky, 13 a11
Yellow and red, 7a10	St. Domingo, 15 a38
	Cuba, 15 a38

PLASTER PARIS—

Cargo, pr ton cash 2.75a	Ground per bbl. 1.12a
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SUGARS—

Hav. wh. 100lbs 9a10.50	St. Croix, 100lbs 7.00a8.00
Do. brown at 7.50	Brazil, white, a
Porto Rico, 6.70a7.50	Do. brown, a
New Orleans, 6½a7½	Lump, lb. c.

FLOUR—We quote

Superfine How. st., from stores, bl. 4.93a4.	
Do. City Mills, 4.	
Do. Susquehanna, 4 a	
Rye, first 2.87a	
Corn Meal, kiln dried, per bbl. 2.62	
Do. per hhd. 11.75	

GRAIN—

Wheat, white, p bu 95a106	Peas, black eye, 50a55
"best Pa red 60a	Clover seed, store 45.50a
"ord. to pri. Md 36a95	Timothy do. 2a2.50a
Corn, white, 44a45	Flaxseed, roughst. 1.35
"yellow Md. 45a48	Chop'd Rye, 100 lbs. 1.25
Rye, Md. a58	Ship Stuff, bus. 20a
Oats, Md. 21a22	Brown Stuff, 15a
Beans, 101	Shorts, bushel, 10a
	29a

FEATHERS—per lb.

Havana, 7 a 8	Java, lb. 10 a12
P. Rico a Laguay. 6½a 8	Rio, 6½a7½
St. Domingo, 5½a 6	Triage, 3½a 4½

CANDLES—

Mould, common, 9a10	Sperm, 32a33
Do. choice brands, 10½	Wax, 60a65
Dipped, 8a 9	

NEW AGRICULTURAL ESTABLISHMENT,

At the old stand formerly occupied by JOHN T. DARDING, fronting on Grant & Ellicott streets, adjoining Dinsmore & Kyle, Pratt st. wharf.

G. H. BRYSON & J. JOHNSON,

Having entered into a co-partnership under the name G. H. Bryson & Co., offer for sale at reduced prices, a great variety of Ploughs, Castings, &c., as

Davis, Hill Side,	Grain Cradles,
S & M. Sub Soil,	Cattin' Box,
Chenoweth, Freeborn & Hitchcock,	Corn Shellers,
Woods, Cultivators,	Corn and Cob
Wiley, Harrows,	Crushers, &c.
Bar Sher, Wheat Fans,	

Ross' Patent Hay and Straw Cutter, and every variety of FIELD AND GARDEN SEED.

Repairing done on the lowest terms. Castings by the ton or otherwise. A liberal discount allowed to those who buy to sell again. *aug 21 G. H. BRYSON & CO.*

HARVEST TOOLS.

In store and for sale by J. S. EASTMAN, Pratt street, near Charles, Wolf's very superior Grain Cradles, (such as I have been selling for the last five years;) Grain and Grass Seythes; steel and wood Hay Forks; an assortment of Hay Rakes, Horse Powers and Thrashing Machines, of different patterns, for 2 and 4 horses; Wheat Fans, plain and expanding Corn and Tobacco Cultivators; Corn Planters, my superior Straw Cutters, of all sizes, with wood and iron frames. Also a large assortment of PLOUGHS, of all sizes, and other farming implements. *May 2*

PERUVIAN GUANO.

The subscriber, agent for the Peruvian Guano Company, has received per ship Orpheus, 400 tons of Peruvian Guano—and will hereafter be regularly supplied with the article by the Company, who alone have the right to export it.

Orders for any quantity, (not less than one ton) will be supplied at the following rates,—

From 1 to 5 tons,	\$3	per 100 lbs.
6 to 10 "	\$2.87½	" "
Above 10 tons,	\$2.75	" "

A Pamphlet upon the nature, properties and results of this Guano, will be issued from the American Farmer Office, in a few days free of charge.

Applications post paid, will meet with prompt attention.

SAML. K. GEORGE,

sep. 5

No. 2 German st., Baltimore.

CATTLE SHOW.

AGRICULTURAL EXHIBITION & PLOUGHING MATCH.

The Baltimore County Agricultural Society will hold its third annual FAIR on WEDNESDAY and THURSDAY the 23d and 24th days of October, 1844, at Govanstown, 4 miles from Baltimore on the York Road.

The PLOUGHING MATCH will be held on the first day.

The ANNUAL ADDRESS will be delivered on the second day.

The Executive Committee do not deem it necessary to present at this time a list of the various articles for which premiums will be offered, but assure the public that they are determined to go the very extent of their means in encouraging the various branches of Domestic industry, and in endeavoring to excite an increased emulation in cultivating the soil, in raising the most improved breed of stock, and in the manufactures of husbandry. Encouraged by past experience, the Committee appeal with confidence to the Farmers, Mechanics and Manufacturers, and above all, to the ladies of the City and County to aid them by their presence and contribution, to make the Fair of 1844 an event of surpassing interest to our Agricultural friends and the public generally.

HENRY C. TURNBULL,
WM. GOVANE HOWARD,
JNO. B. H. FULTON,
Committee of Arrangements.

Sep 5

NEALE & LUCKETT, No. 3, Light street wharf.

Have received from a gentleman in Maryland, a supply of FLY PROOF WHEAT for Seed, which they offer for sale at \$14 per bushel. This is a very superior wheat, weighing from 60 to 65 pounds to the bushel, yielding largely upon lands of tolerably quality, safe from the ravages of the fly, and making a rich and very nice flour. It is of German origin, and a different species from the Mediterranean wheat, which it is believed does not yield good flour. Persons wishing to supply themselves with seed, are desired to call and examine the sample now on hand. A few hundred bushels more can be obtained from the same source, if early application be made.

Aug 28

EXTENSIVE SALE OF DURHAM CATTLE.

On THURSDAY, the 26th of September next, at 10 o'clock, at the Exhibition ground of the Philadelphia Agricultural Society, Rising Sun Village, on the Germantown Road, 3 miles from Philadelphia, will be sold—A superior lot of improved Short Horns, from the celebrated herd of James Cowen, Esq. of Mount Airy, consisting of young Bulls, Cows, Heifers and Calves, of high blood, imported, or immediately derived from pure imported animals of great repute.

Also some fine young Heifers, from one half to seven eighths blood, sired by Leander, Son of Dairy Maid.

Mr. Gowen assures us that this sale will in point of numbers and character, far exceed his sale of 1842. Leander and Colostr, the younger, will be among the Bulls; and the celebrated Dairy Maid, the beautiful Cleopatra, Walnut, and Miss Model, among the Cows to be offered.

Catalogues will be ready in due time, and the Cattle will be on the ground for exhibition two days previous to the sale.

We invite the special attention of Breeders and the lovers of fine stock in general, to this splendid selection of Cattle. So excellent an opportunity for procuring fine specimens of the best Durhams, but seldom occurs.

WOLBERT & HERKNESSE,
aug. 26 Auctioneers.

AGRICULTURAL MACHINERY,

Manufactured by Robt. Sinclair Jr. & Co.

Co. No. 60 Light street, viz:

Corn Mills,	price \$40	most approved)	8 to 12
Sinclair & Co.'s Corn and	Subsoil Ploughs,		8 to 12
Cob Crushers,	30 Other kinds, embracing about		
Baldwin's do.	65 25 sorts, and suited to ev-		
Goldborough's Corn Shell-	ery variety of soil, 2.50 to 13		
ing & Shucking Machine.	35 Corn & Tobacco Cultivat.	5 to 6	
Hand do. assorted,	15 to 17 Harrows,	6 to 10	
Vegetable Cutters,	20 Grain Cradles & Scythes,	4 to 5	
Thrashing Machines,	40 to 60 Plough and Machine Cast-		
Horse Powers,	75 to 100 inge,	per lb. 4 to 5	
Cylindrical Straw Cut.	28 to 45 Fanning Mills,	25 to 30	
Do. extra large,	75 Horse Hay Rakes,	11	
Common Straw Cutters,	5 to 12 Grindstones, on friction rol-		
Botts & Green's do.	25 to 30 less,	13	
Pierce's and Dolphin self-	Lime Spreaders,	30	
sharpening Plows, (new &			

Ploughs and Machinery REPAIRED on reasonable terms. Also GARDEN AND FARMING TOOLS—of every sort. GARDEN AND FARMING SEEDS " " " " GARDEN AND FARMING BOOKS " " " "

The agricultural community will find it their interest to examine our stock of Implements, Seeds, &c. We promise purchasers polite attention and lowest market prices. R. S. Jr. & Co.

POUDRETTE

Of the very best quality for sale. Three barrels for \$5, or ten barrels for \$15—delivered free of cartage by the New York Poudrette Company, 23 Chambers street, New York. Orders by mail, with the cash, will be promptly attended to, and with the same care as though the purchaser was present, if addressed as above to D. K. MINOH, Agent.

A supply now on hand from the N. York establishment, by the single barrel, or larger quantity. For sale by

SAML. SANDS,

je 19

office of the Farmer, Baltimore st.

FARMERS! EXAMINE FOR YOURSELVES!

The well selected stock of Implements belonging to JAMES HUEY & CO. No. 7 BOWLY'S WHARF, Baltimore. Our stock consists of a large lot of PLOUGHS, SHEARS, POINTS, and CULTIVATORS, which we will sell low to suit the times—among which rank the economical WILEY, and the MINOR & HORTON PLOUGH of the N. York composition metal and manufacture—the share has a double point and edge, equal to two shares and points. We keep on hand all kinds of PLOUGHS, premium CORN SHELLERS, HAY & STRAW CUTTERS, Corn & Cob CRUSHERS, Horse RAKES, Corn and Tobacco HOES. Farmers and Planters on the Eastern and Western Shores may send their orders with confidence, as they will be attended to with promptitude. We also keep GARDEN & FIELD SEEDS. Thankful for past favors, we hope to merit a continuance of the same. Agents for the above implements,

S. L. STEER, Market st. near the corner of Paca, Baltimore E & W. BISHOP, Bel-air market. Baltimore. fe 28

PORTABLE TUBULAR STEAM GENERATOR.

The undersigned successors to the late firm of Bentley, Randall & Co. are manufacturing, and have constantly on hand a full assortment of the above Boilers, which within the last few months have undergone many improvements: we can now with confidence recommend them for simplicity, strength, durability, economy in fuel, time, labor and room, to surpass any other Steam Generator now in use. They are equally well adapted to the Agriculturist for cooking food for cattle and hogs, the Dyer, Hatter and Tanner for heating liquors, to Manufacturers (both Cotton and Woollen) for heating their mills, boiling sizing, heating cylinders, &c. to Pork Butchers for heating water for scalding hogs and for rendering lard, to Tallow Chandlers for melting tallow by circulation of hot water (in a jacket,) to Public Houses and Institutions for cooking, washing and soap making, and for many other purposes for all of which they are now in successful operation; the economy in fuel is almost incredible; we guarantee under all circumstances a saving of two thirds, and in many instances fully three fourths—numerous certificates from the very best of authority can be produced to substantiate the fact. We had the pleasure of receiving the premium for the best Steam Apparatus at the Agricultural Fair held at Govanstown in October 1843.

Manufactory, McCausland's old Brewery, Holliday st. near Pleasant st., Baltimore, Md.

Dec. 6. tf

RANDALL & CO.

GRAIN CRADLES! GRAIN CRADLES!

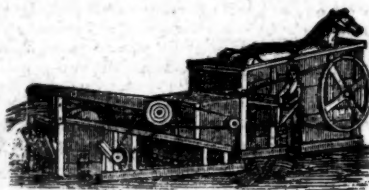
We mean what we say when we assert that A. G. MOTT, corner of Ensor and Forest sts. Old Town, near the Bel-air market, is now making up, and has for sale, the very best and cheapest article of the kind in the Baltimore market, and no mistake. Try them.

je 19

MEDITERRANEAN WHEAT.

600 Bushels of this Wheat for Seed, raised by a gentleman in Baltimore County, will be sold low, if immediately applied for.—The quantity is not to be surpassed by any wheat raised in the State of Maryland. A sample can be seen at the office of the "American Farmer" For Sale by

SAMUEL SANDS.



WHITMAN'S THRASHING MACHINE & HORSE POWER DEPOT. No. 2 Eutaw st., opposite the Eutaw House, where the subscriber now offers for sale all his new improvements in the Thrashing-machine and Horse-power line, consisting in part of his new SEPARATOR, patented March 20th, 1844, which thrashes and cleans the grain at one operation, and is considered the greatest labor saving machine, and of the most value to the farmer of any machine ever invented in this country.

NEW STRAW CARRIERS—These machines thrash and separate the grain from the straw in a rapid and perfect manner, and are highly approved by all.

Improved CYLINDER THRASHERS—Warranted to thrash faster than any other kind of thrashers that can be produced.

Improved HORSE POWERS, on the rail way principle, for one or two horses. These machines are durable, possess double the power of the common kind, and occupy about one eighth of the room. All of the above are made of the best materials, by experienced workmen, and warranted. I will furnish a man to go out with them and set them up in any part of this State, if desired.

As this is no humbug, all who feel an interest in agriculture are respectfully invited to call and examine for themselves.

All orders addressed to the subscriber, Baltimore city, will meet with prompt attention.

je 17

EZRA WHITMAN, Jr.

JAMES MURRAY'S

PREMIUM CORN AND COB CRUSHERS.

These already celebrated machines have obtained the premium by a fair trial against the other Crushers exhibited at the Fair held at Govanstown, Balt. Co. Md. Oct. 18th, 19th and 20th, 1843, and the increased demand enables the patentee to give further inducements to purchasers by fitting an extra pair of grinders to each machine without extra charge. Prices \$25, 30, 35, 40, 45.

ALSO, small MILLS, which received a certificate of merit, for \$15.

I have also superior CUTTING BOXES, such as will bear inspection by either farmers or mechanics.

Also, Horse Powers, Mills, Corn Shellers, Mill and Carry-log Screws, small Steam Engines, Turning Lathes, &c. &c.

Also, a second hand Steam Engine, 16 horse power, and the works for two Saw Mills.

Any kind of Machine, Model or Mill-work built to order, and all mills planned and erected by the subscriber, warranted to operate well.

Orders can be left with J. F. Callan, Washington, D. C.; S. Sands, Farmer office; or the subscriber,

Mr. Abner Linthum, Jr., and all Machinists are invited to a fair trial of Grinding against my Corn and Cob Crushers, and if I do not do more work, taking the power, quantity, and quality into consideration, I will give them my machine gratis.

Patent Rights for sale by the subscriber.

no 8 JAS. MURRAY, Millwright, Baltimore.



MANGELWURZEL AND FRENCH SUGAR BEET SEED,

Just received and for sale by

ROBT. SINCLAIR JR. & CO. Seedsmen, No. 60 Light st.

CLEAZY'S IMPROVED SELF-SHARPENING PLOUGH.

J. S. EASTMAN, Pratt street, a little west of the Baltimore & Ohio rail road Depot, would invite public attention to this superior implement, both as to its simplicity, cheapness and good work with light draft. He will furnish patterns to manufacturers living out of this state on reasonable terms.

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NEW PATENT CORN MILL,—CORN AND COB CRUSHER.

The subscribers have recently invented and constructed a Corn Mill and Crusher, to be worked by hand or horse power, which are remarkably simple and admirably adapted to the present wants of farmers. Either of the above machines may be seen in operation at our warehouse, No. 60, Light street.

ROBT. SINCLAIR, JR. & CO.

Prices—Corn Crusher \$30—Corn Mills \$40.

ap 29

THE BOMMER MANURE METHOD.

We wish to afford every facility to the introduction of this method, as the better it is known the higher it will be esteemed. If farmers who are living in a neighborhood will club together, we will offer them the following inducements to purchase, viz. To any club of Five ordering the method to one address, we will make a deduction of 15 per cent. To a Club of Ten, 20 per cent. reduction, and to larger clubs, a still larger discount upon our established rates for single methods, which are as follows:

For a garden up to 20 acres,	\$6
" 100 acres arable land,	10
" 200 " "	15
" 300 " "	18
" 400 " "	20
Unlimited number of acres,	25

Purchasers of a smaller right can at any time increase it by paying the difference in price.

ABBEY & CO.

Southern proprietors of the Patent Right, at Parsons & Preston's Book Store, adjoining the Rail Road Depot

mh 13 tf

in Pratt street, Baltimore.

Those who find it more convenient, can leave their orders with S. SANDS, at the office of the American Farmer, who will promptly attend thereto.

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MURRAY'S CORN & COB CRUSHERS & GRINDERS.

The subscriber having so simplified the construction of the Machine, and having at the same time added to its efficiency, both for the quantity and quality of its work, is now enabled to sell for \$25 Crushers of the capacity of cylinder heretofore sold at 40 dollars—Hand Crushers for 20 dollars—either with or without self-feeders. Any other machines made to order. Also, Repairs of all kinds of agricultural implements. These machines can be seen in operation opposite the Willow Grove Farm of Mr. J. Donnell.

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WM. MURRAY.

AGRICULTURAL IMPLEMENTS.

J. S. EASTMAN, at No. 36 West Pratt st. about half a square west of the Baltimore and Ohio rail road depot, has on hand a great variety of Plows and Plow Castings, and other Farming Implements at wholesale and retail, as follows, viz. his newly patented Cleazy self-sharpening plows of 7 different sizes, (and one large left hand do) he has many testimonials to show the superior merits of this implement.

Also—Gideon Davis' improved ploughs, of all sizes, wrought and cast shares, do do. Connecticut improved, a superior article for light soil; Evans' reverse point ploughs, with cast shares only; Wyman's No. O. self-sharpeners, various bar-share and coulter ploughs and superior side ploughs, etc. etc. Also, corn and tobacco Cultivators, wheat fans, cylindrical straw cutters of various sizes, a superior article; lime carts, superior Pennsylvania made grain Cradles; small Burrstone Mills for driving by horse power or steam; Corn Shellers, Thrashing Machines (and horse-powers for two or four horses) made very durable and to thresh clean. Bachelder's and Osgood's patent corn planters, etc. with a great variety of their implements made of the best materials and in the best manner. All the above are sold at reduced prices to suit the times.

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